



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF

March 2017

Data Qualified?
Yes / No

Location/STORET Station Name: Silver Lake @ Center

Date: 09/06/2017
(mm/dd/yyyy)

STORET # G1CE0007

WBID: 2825A

Latitude: 28.8379

(Decimal Degrees)

County: Lake RQ - 2017-09-04-44

ORG ID: 21FLCEN

Longitude: -81.8036

(Decimal Degrees)

Receiving Body of Water:

Field ID: G1CE0007

Sampling Team Members								Sampling Equipment			
								☒ Sample Container	☐ Van Dorn	☐ Pole	
								☐ Carboy	☒ Syringe		
								☐ Dipper	☐ Other		
								Equipment ID			
								Collection Method			
								☐ Wading	☒ Via Boat		
								☐ From Shore	☒ Canoe/Kayak		
								☐ Other (note below)	☐ Electric Motor		
										☒ Gasoline Motor	
Water Level: Dry / Pooled / Low / Normal / <u>High</u> / Flooded								Matrix: <u>Fresh</u> / Marine / DI			
Meter ID# <u>Boop / Non</u>				Photos: Yes / <u>No</u>				Tide Falling: Yes / No / <u>NA</u>			

Field Sample

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	13:39	0.3	1.6	9.0	119	8.7	0.2	1.6 (s)	506	30.0
CEN		1.1		8.5	112	8.7	0.2		506	29.0

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other

SBIO ID Numbers: SBIO-ID: RPS-ID: Macrophyte-ID: LIMS#: 1928735

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	<u>SA7163030</u>	<u>6/12/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☒ Ice			
Tracers	☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			
	<u>PCR</u>	<u>ICE</u>			

Contains 1:1 Sulfuric Acid
Lot No: SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

Contains 1:1 Sulfuric Acid
Lot No: SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

QA/QC Sample Information

Duplicate

Time Zone: EST CEN		Sample Depth (m): <u>0.3</u>	Field ID: <u>G1CE0007-DUP</u>		
Time: <u>1342</u>		Total Depth (m): <u>1.6</u>			
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved	Silver Lake @ Center_DUP G1CE0007 DUP Field ID ↑ STORET ↓ Date: 09/06/2017 RQ-2017-09-04-44 G1CE0007_DUP	☐ Ice ☐ H ₂ SO ₄			☐ < 2
Metals		☐ Ice ☐ HNO ₃			☐ < 2
Filtered		☐ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll		☐ Ice			
Physical/Aggregate (Fresh)		☐ Ice			
Physical/Aggregate (Marine)		☐ Ice			
Microbiology	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS ☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Tracers	☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Blank

Time Zone: EST CEN		Time: <u>1401</u>	Field ID: <u>Field Blank</u>	Location: <u>G1CE0007 - Back of truck</u>	
☒ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipment ID: <u>DI # 4</u>			
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nut	Field Blank Field ID ↑ STORET ↓ Date: 09/06/2017 RQ-2017-09-04-44 Field Blank	☐ Ice ☐ H ₂ SO ₄			☐ < 2
Metals		☐ Ice ☐ HNO ₃			☐ < 2
Filtered Nut		☐ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll		☐ Ice			
Physical/Aggregate (Fresh)		☐ Ice			
Physical/Aggregate (Marine)		☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other			

Notes:

Ramp 28.83140 - 41.5037		Silver Lake @ Center G1CE0007 Field ID ↑ STORET ↓ Date: 09/06/2017 RQ-2017-09-04-44 G1CE0007	
Signature: <u>[Signature]</u>		Date: <u>9/6/17</u>	

Field Parameters Entered into LIMS: <u>LND 10/12/17</u>	Field Parameters QC in LIMS: _____
(Initials/Date)	(Initials/Date)
Date Migrated to STORET: _____	Field Sheets Scanned/Saved: _____
(Initials/Date)	(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 78033 MACROPHYTE ID: 10748 LATITUDE: 28.8379
 COUNTY: Lake STORET #: 61CE0007 LONGITUDE: -81.8036
 DATE: 9/6/17 TIME: 1339 SAMPLING AGENCY: FDEP-CEROL
 SITE NAME: Silver Lake @ Center WBID: 2825A
 FIELD ID/NAME: 61CE0007 LAKE SIZE: 156 HA RQ: 2017-09-04-44

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category - from GIS): Forest/Natural ☐ 5 ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☒ 100 ☐ Commercial ☐ Industrial ☐ Other (Specify) ☐				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: 1.010					
Local Watershed Erosion (select one): ☒ None ☒ Slight ☐ Moderate ☐ Heavy				Artificially Impounded ☐ Yes ☒ No					
Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy				Land Use Source & Year: <u>Run 53 2017</u>					
STORMWATER INPUTS <u>10</u>		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16		Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 15 14 13 12 11		Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6		Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1	
LAKESIDE ALTERATIONS <u>9</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 20 19 18 17 16		Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected) 15 14 13 12 11		Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 10 9 8 7 6		Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1	
BUFFER ZONE <u>12</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16		89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 13 12 11		50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6		< 29% of shoreline with >18m buffer 5 4 3 2 1	

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # <u>SA-7163030</u> Exp. Date: <u>6/12/18</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☐ Normal ☒ High						Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____					
Meter Readings: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>30.0</u> <u>8.7</u> <u>9.0</u> <u>119</u> <u>506</u> <u>0.2</u> Mid-Depth: _____ Bottom: <u>1.1</u> <u>29.0</u> <u>8.7</u> <u>8.5</u> <u>112</u> <u>506</u> <u>0.2</u>						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID: <u>BOOP- NON</u>						Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green					
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____					
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot #: _____ Exp Date: _____ Algal Bloom/Algal ID Sample Taken? Yes ☐ No ☒ No Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know						Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☒ ☐ Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☐ ☐ ☒ ☐ Exotic Apple Snails ☐ ☒ ☐ ☐					
Weather Conditions: <u>80's, cloudy</u>											
SAMPLING TEAM: <u>Mike Linger, Mike Drennan</u>						SIGNATURE: <u>[Signature]</u>			DATE: <u>9/6/17</u>		

Waterbody: <u>Silver Lake</u>		County: <u>Lake</u>		Date: <u>9/6/17</u>							
Analyst: <u>Mike Linger / Mike Pienan</u>		Signature: <u>[Signature]</u>		STORET: <u>61CE0007</u>							
Except where noted as "sp." species level identification required. *Genera that may require lab verification*				Lake units sampled (circle one group):							
Plants in bold = FLEPPC invasive exotic.				1, 4, 7, 10 <u>2, 5, 8, 11</u>							
It is important to note dominant or co-dominant taxa (by areal extent) for each unit. Use "D" to denote dominant taxon, or "C" for the 2 co-dominant taxa.				3, 6, 9, 12							
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Acer rubrum						Fraxinus					
Alternanthera philoxeroides						Fuirena scirpoides					
Amaranthus australis						Gordonia lasianthus					
Andropogon sp.						Habenaria repens					
Azolla filiculoides (A. caroliniana)						Hibiscus coccineus					
Baccharis sp.						Hibiscus grandiflora					
Bacopa caroliniana						Hydrilla verticillata					
Bacopa monnieri						Hydrocotyle sp.					
Bidens alba						Hygrophila polysperma					
Bidens laevis						Hymenocallis sp.					
Bidens mitis						*Hypericum fasciculatum					
Blechnum serrulatum						*Hypericum hypericoides					
Boehmeria cylindrica						*Hypericum myrtifolium					
Brasenia schreberi						Ilex cassine					
Cabomba caroliniana						Ipomoea aquatica					
Canna						Ipomoea sagittata					
Centella asiatica						Itea virginica					
Cephalanthus occidentalis						Juncus effusus					
Ceratophyllum demersum						*Juncus marginatus					
Chara sp.						*Juncus megacephalus					
Cicuta maculata						Juncus repens					
Cinnamomum camphora						*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Colocasia esculenta						Leersia hexandra					
*Commelina						Landoltia punctata (Spirodela punctata)					
Crinum americanum						Lemna sp.					
* Cyperus alternifolius (C. involucratus)						Leucothoe racemosa (Eubotrys racemosa)					
Cyperus articulatus						Limnium spongia					
Cyperus haspan						Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua					
*Cyperus polystachyos						*Ludwigia arcuata					
*Cyperus odoratus						*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrtilla racemiflora						*Ludwigia leptocarpa					
Decodon verticillatus						Ludwigia (native)					
Diodia virginiana						*Ludwigia octovalvis					
*Echinochloa crus-galli						* Ludwigia peruviana					
*Echinochloa muricatum						*Ludwigia repens					
Echinochloa walteri						Ludwigia suffruticosa					
Eclipta prostrata (E. alba)						Luziola fluitans (Hydrochloa carolinensis)					
Eichhornia crassipes						Magnolia virginiana					
*Eleocharis						Mayaca fluviatilis					
Eleocharis cellulosa						Melaleuca quinquenervia					
*Eleocharis elongata						Micranthemum glomeratum					
Eleocharis equisetoides						Micranthemum umbrosum					
Eleocharis interstincta						Mikania scandens					
Eleocharis submersa viviparous						Mimosa pigra					
*Eriocaulon compressum						Myrica cerifera					
*Eriocaulon decangulare											
Eupatorium capillifolium											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Silver Lake @ Center					Date: 9/6/17						
SPECIES	Z	S	8	11	Collected? (✓)	SPECIES	Z	S	8	11	Collected? (✓)
Myriophyllum aquaticum						Salix caroliniana	/			/	
*Myriophyllum heterophyllum						Salvinia minima				/	
*Myriophyllum laxum						Sambucus canadensis					
*Myriophyllum pinnatum						Sapium sebiferum					
Myriophyllum spicatum						Saururus cernuus					
*Najas filifolia						Schinus terebinthifolius					
*Najas guadalupensis						*Schoenoplectus californicus				/	
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea						*Schoenoplectus tabernaemontani (Scirpus validus)					
Nitella spp.				/		Scirpus cubensis (Oxycaryon cubense)					
Nuphar sp.			/	/		Scirpus cyperinus					
Nymphaea mexicana			/	/		*Sesbania					
Nymphaea odorata		/	/	/		Solidago sp.					
Nymphoides aquatica		/	/	/		Sparganium americanum					
Nyssa sylvatica var. biflora						Spartina bakeri					
Orontium aquaticum						Spirodela polyrhiza					
Osmunda cinnamomea						Taxodium sp.					
Osmunda regalis						Thalia geniculata					
Panicum hemitomon						Thelypteris interrupta					
Panicum repens	/	/				Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum					
*Paspalum repens						Typha sp.	/	/	/	/	
Paspalum urvillei						Urochloa mutica (Brachiaria mutica)					
Peltandra sp.						*Utricularia gibba (U. biflora)				/	
Persea sp.						*Utricularia foliosa		/	/		
Pennisetum purpureum						*Utricularia inflata					
Phragmites australis						*Utricularia purpurea					
Pinus elliotii						*Utricularia radiata					
Pistia stratioides						*Utricularia resupinata					
Pluchea sp.	/		/	/		Vallisneria americana				/	
*Polygonum glabrum (densiflorum)						Vitis sp.					
Polygonum hirsutum						*Websteria confervoides					
*Polygonum hydropiperoides						Wedelia trilobata (Sphagneticola trilobata)					
*Polygonum punctatum						Wolffiella spp.					
*Polygonum						Woodwardia virginica					
Pontederia cordata		/	/	/		Xyris sp.		/			
*Potamogeton diversifolius		/	/	/		Zizania aquatica					
*Potamogeton illinoensis	/	/	/	/		Zizaniopsis milacea					
*Potamogeton pusillus						<i>B. microcephala</i>		/	/	/	✓ LAD
*Potamogeton pectinatus (Stuckenia pectinatus)						<i>uncus canadensis? Scirpoides</i>		/	/	/	✓ LAD
Proserpinaca pectinata						<i>Eleocharis geniculata</i>	/	/	/	/	
*Rhexia						<i>Fuirena pumila</i>			/		
*Rhynchospora corniculata						<i>Setaria magna</i>	/				
*Rhynchospora inundata						<i>Sacciolepis indica</i>	/				
Rhynchospora nitens	/	/	/	/		<i>Phyla nodiflora</i>	/				✓ LAD
Ricciocarpus natans						Small opp-At./sessile leaves	/			/	
Sabal palmetto						<i>Utricularia cornuta</i>		/	/	/	✓ LAD
Sacciolepis striata						<i>Alajes pectinata?</i>	/			/	✓ LAD
*Sagittaria filiformis						→ <i>O. idealensis uniflora</i>					✓ LAD
*Sagittaria graminea						→ <i>Potamogeton pectinatus</i>					
*Sagittaria isoetiformis											
Sagittaria lancifolia	/	/	/	/							
Sagittaria latifolia											